

HISTORY OF A CASE OF PERIODICAL SINGULTUS; SUCCEEDED BY SEVERE DYSURIA, TERMINATING IN ISCHURIA AND ULCERATION OF THE KIDNEY.

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BY DR. JOSEPH TORREY.

THE subject of the following case, is a female, twenty-four years of age, of a florid countenance and exquisite sensibility. She had enjoyed good health till June, 1809, when by taking cold, menstruation was suppressed, and has rarely since recurred till the present time. She has repeatedly experienced severe indisposition from no other apparent cause than the loss of a relative; and her late confinement she dates from an event of this nature:

I was called to visit her Jan. 21st, 1812, and received the following intelligence respecting her.

Having retired to rest on the evening of Feb. 1811, she was roused from sleep by the news of the sudden death of an uncle near her dwelling, when she arose and repaired to the scene of distress. To this succeeded a fever of some continuance, from which she did not recover to perfect health; but was troubled with dyspepsia, and amenorrhœa.

In March she was attacked with singultus, which continued to recur daily. It continued with less severity and regularity, till November, when it assumed a more fixed, severe, and regular character; commencing precisely at 11 A. M. and subsiding at 5 P. M.

Through the winter she was able to go about house; but her health was feeble, and she suffered much from indigestion.

She had been treated by various physicians with musk and sundry fœtids, and with chalybeates and other tonics, without any apparent advantage.

My first attempt was to break up the morbid habit (which I then supposed to exist) by producing a strong impression on the stomach and neighboring organs. For this purpose I prescribed ʒiij Tinct. Lobeliæ Inflat. at half past 10 to be repeated every 10

minutes till it produced vomiting. The only effect which followed was a distressing sensation which continued for a day or two. I then ordered $2\frac{1}{2}$ grs. Opium to be given at half past 10; which had no influence on the succeeding paroxysm.

She then took 4 grs. Oxyd. Zinc every 4 hours till she had taken 16 doses. This only produced nausea and a large fluxion from the salivary glands.

Considering the intermittent character of the complaint, I had recourse to the Cinchona; of which she took ʒi Decoct. with ʒij Tinct.^c every 8 hours. After using this a short time there was added to each dose as much Aqua Ammon. Pur. as she could comfortably swallow. After a few days, Fowleri Min. Solut. was substituted for the Aqua. Ammon. until she complained that it occasioned uneasy sensations in her bowels. She then took the Ammoniacet. Cupr. for a week; in which time I made one application of electricity, with a design to continue it; but having applied a blister to the region of the stomach, its irritation was so distressing as to excite a febrile commotion, which required exclusive attention for some days; since which she has taken successively the Nitras Argent. and Oxyd. of Bismuth.

April 1. The pulse, in general tolerably full, being now rather tense, I took from her arm ʒxii blood. She bore the operation well; it was finished at 11, and in 4 minutes the hiccup came on.

Soon after bleeding, she complained of pain in her lower limbs, which was succeeded by a slight Catamenial Discharge, which had been wanting many months.

May 1. The hiccuping paroxysms though gradually reduced to $3\frac{1}{2}$ hours, still daily recurring, I was determined to make a more thorough trial of opium.

I left her a quantity of pills containing each 1 gr. I directed 4 to be taken at 9 A. M. but from timidity she took but 3 the first time, which neither induced sleep nor prevented the paroxysm.

May 3, 9 A. M. Took the prescribed dose: at 10 fell asleep; continued in that state till 4 P. M. singultus totally suspended; feels, after awaking, extremely irritable, and occasional faintness till evening.

May 4. Took 4 pills with similar effect.

May 5. Took no pills and had no Paroxysm.

May 6. Took no Opium, Paroxysm came on at the usual time,

but lasted only a few minutes. After this the Opium being laid aside, the hiccup recurred daily, increasing in duration till the paroxysms lasted an hour each day, for several weeks; when she was induced to resume the use of the Opium, and with the same results as before.

The extreme nausea and vomiting which this medicine produced discouraged her and her friends still more, from its farther use.

June 6. I was called to visit her on account of a violent spasmodic affection of her stomach.

I found on, inquiry she had taken some asparagus at dinner. She immediately took Sulphat. Zinc, and threw it up undigested. The spasms and distress soon subsided.

June 8. She began to raise mucous deeply tinged with blood. It appeared to come into her mouth without cough or effort of the stomach. For its relief she took Tinct. Digit. Purp. and Acet. Plumb.; but venesection was found more useful than any other remedy.

After this symptom had in a measure subsided, she was persuaded to try the exercise of riding, which somewhat improved her appetite and digestion; but the hiccup continuing an hour or more each day, I advised her to a persevering trial of the Opium, in such a way as totally to prevent them for a week or more.

Dreading the intolerable sickness which it invariably occasioned, and desiring to elude the sympathies and remonstrances of her connections, who were opposed to its use, she conceived a wish to leave her own home, and to remain at mine, while undergoing the process; that she might be under my more immediate observation and attention.

August 25. She arrived in the midst of a paroxysm, which lasted an hour, as usual.

Aug. 26, 8 A. M. Took 4 grs. Opium, at 9 fell asleep; at 3, P. M. awoke, and after a short space of great uneasiness, a most distressing sickness and retching commenced, for which she took strong coffee, ordinary doses of Opium with Peppermint, Ol. Cinnamon. Ol. Absinth. Aether, Oxyd. Bism. &c. but all were equally unavailing; it continued till evening and then subsided, sua sponte.

Aug. 27. Took no Opium, and had no hiccup.

Aug. 28. Repeated the Opium in the same manner and with the same result as on the 26th. Aug. 30. As the 28th.

In the afternoon of the 30th she observed "I have no fear that the hiccups will trouble me any more." On being asked why? She replied, "I feel differently at my stomach, where a peculiar sensation has hitherto impressed my mind that they were not finally removed; but I now feel so free from it, that I am confident they will not return. It is worthy of remark, that herein she has not been disappointed.

She soon after complained of pain in the region of her left kidney, which she said she had felt more or less, since the 28th.

In the evening, it proceeded in the course of the left ureter till it fixed in the pelvis of the abdomen. A suppression of urine took place, which became so distressing by 3 in the morning of Sept. 1, as to require relief by the catheter.

She was now informed that the obstruction was probably occasioned by a small calculus, which had passed from the left kidney through the ureter into the bladder: that it was very important she should unite her endeavours with such medical aid as would be used, to promote its expulsion: and that of course she must use every practicable endeavour to void the contents of the bladder without the catheter, as the use of that instrument would necessarily preclude the discharge of the supposed calculus.

This idea she fully adopted; and to facilitate the discharge, she used the various appropriate remedies; but the use of the catheter was notwithstanding indispensable twice or thrice* in twenty-four hours, till Sept. 7th, when, after a persevering, agonizing effort, a sound was heard as of a small hard substance falling into the vessel over which she was sitting. "Something" said she, "has passed from me." And directly there was a free discharge of urine. On examining the contents of the vessel we found, to our astonishment, two small pieces of perfect iron, powerfully attracted by the magnet; the one $\frac{5}{16}$ of an inch in length and one line in breadth, with craggy points; the other, about half the dimensions.

I asked her mother, who was present, if she were sure they were not in the bed pan before it was used? She replied, she had

* The frequent necessity for the use of the catheter, as well as many anomalous symptoms, attending this case, and also some unusual effects of remedies, will probably appear to others as they did to me, somewhat extraordinary. I can only explain them by the extreme irritability of the system induced by a cause soon to be developed.

paid particular attention to that circumstance, and was certain there was nothing in it immediately before it was used. I then inquired of the patient if she had ever taken any medicine of which iron was an ingredient? She answered, "In March, 1811, (19 months ago) my Physician gave me a paper, containing what he called a preparation of steel to be infused in a bottle of wine, of which I was directed to take several times a day. On a certain evening, I received a dose at the hand of a young lady, which, upon swallowing seemed so coarse, and gave such uneasiness as caused me to exclaim, "What have you given me? drugs and all? I believe it will kill me."

It ought not to pass unnoticed, that an aged and respectable aunt, present when this occurred, distinctly remembers these expressions. Her mother now subjoins: "Mary, I now remember saying to you, "I don't know but your steel medicine has caused your hiccups: for they did not begin till after you had taken of it."

It was now an interesting question, whether the injury sustained by the urinary organs would heal by the first intention, or whether ulceration would follow; and if so, what influence the injury or destruction of one kidney would have on the functions of the other. We therefore noted the circumstances attending the discharge with particular circumspection. For a week, there was a regular discharge two or three times in twenty-four hours without the catheter, though not without pain. The pain and soreness was then so much increased as to occasion a suppression, rendering that instrument indispensable. Soon after, purulent matter was seen to float distinctly in the urine. The discharge was not constantly purulent; but alternately purulent and limpid; in quantity from lb. ss. to lb. i.

Sept. 15. The excretion began to recur more rarely; the period gradually increasing in length till on Nov. 4th, it had been suspended 16 days and 11 hours; after which the space between the excretions was from 14 to 11 days till March 1813, after which it gradually shortened through the succeeding summer, when it resumed its natural frequency.

From Oct. 13 to March 10, a period of 21 weeks, there were only 12 urinary evacuations, amounting in all to 13 lb. $\frac{3}{4}$. These 12 discharges (2 or 3 of them excepted) containing each from 12

to 85 small scorice of iron, resembling such as are chipped off when cutting the thread of a screw, being curved in form of a crescent, sharply pointed at each end like a surgeon's needle: in length, if straightened, from 1 to 3 lines.* All the iron discharged has been subjected to the test of the magnet, and perfectly obeyed its power.

Previous to each evacuation, since the periods have been so long, she has had 1 or 2 days notice, by an increase of sickness, and of pain, beginning in the region of the left kidney and thence proceeding to the pelvis. She repeatedly observed at these times that she felt as if full of cambrick needles.

In order to ascertain whether the secretion went slowly on, throughout those periods, or did not commence till towards their close, I introduced the catheter 2 days before the expected excretion, and 12 days subsequent to the last, and obtained only $\frac{1}{2}$ a table spoonful of urine. Since the intervals became so long, the urine has been purulent once only.

She has been subject to paroxysms of nausea and vomiting, from the time she swallowed the iron in March 1811; but soon after her nephritic symptoms commenced, they became more frequent: assuming a diurnal revolution, they commenced earlier, and continued later each days, till at length she was in the constant act of vomiting most of the 24 hours, for many days in succession.

This sickness is of a character somewhat peculiar: it manifestly differs from an idiopathic affection of the stomach, such as cholera which for the most part rapidly exhausts the patient.

It seems more unamalous to certain sympathetic affections of that organ; for instance, that which attends uterine gestation. The efforts of the stomach though extremely violent, are almost fruitless: nothing being brought up but a little bloody mucous; or what has been recently swallowed. The patient feels confident that it is excited by the nephritic affection; and it evidently quadrates with the pain in her loins, which is a constant, though fluctuating symptom.

* The scorice first discovered, amounted to the number of 12, the largest of which I found would pass with ease through the perforations of the catheter; but lest there should be some larger remaining still to come away, I had the perforations enlarged to 3 lines in length, and one in breadth, which proved amply sufficient to admit the largest that ever passed afterwards.

At the time when this symptom was at its acme, it was the apparent cause of a distressing affection of the œsophagus and larynx, manifested by a very difficult deglutition and a hoarseness resembling croup. At this time I was called out of bed by her nurse, who seemed to think her life and sufferings were drawing to a close. I found that for some time she had been unable to swallow, and that the attempt occasioned a struggle and agony which impressed on my mind the idea of Hydrophobia; though a circumstance soon to be related, destroyed the seeming analogy. Her pulse were almost imperceptible, her extremities pale and cold, her countenance much contracted and pale, and the powers of life apparently retiring to the citadel.

I asked her if she could think of nothing which she could possibly swallow? In a feeble whisper she replied, "cold water." Some water very cold was given her, which she swallowed in small quantities; and though with much difficulty it was extremely grateful. This article, with tamarind water, citric acid, and pickles, constituted her bill of fare for several days; after which she began to use food, if such it might be called, a little more nutritious: Such as raw apples, very sour, figs, raisins, almonds, &c.; but her choice of nourishment continued remarkably fastidious for a long time, and the slightest deviation from what was congenial to the dictates of her capricious appetite, was sure to exasperate the vomiting excessively.

To relieve her sickness, the whole tribe of Antiemetics were found totally ineffectual, if we except a mixture of ten parts, Elix. Prop. and one each of Ol. Absinth and Ol. Menth. Vulg. After she began to take cold water, her stomach was perfectly quiet for twelve hours; when unfortunately the music of a military company passing by, occasioned such violent vomiting as she could hardly survive.

From this time, however, it gradually abated, and though daily aggravated by various causes, has never returned with equal constancy or severity.

For the affection of the larynx, she took a pill of Calom. and Opium, which seemed to quiet the irritation generally, and to diffuse and equalize the excitement. In a few days a gentle ptyalism was excited; but notwithstanding this inconvenience, she was so sensible of their beneficial effect, as to desire their continued use.

Recovering gradually from these distressing symptoms, she was able by the middle of December to be carried on a bed in a close carriage to her fathers house, a distance of three miles, though it cost her twenty-four hours constant retching and much pain in the lumbar region, she soon appeared as well as before.

She was from this time convalescent with a few occasional interruptions ; and she now enjoys tolerable health, except that her stomach rejects animal food and amenorrhœa still continues.

OBSERVATIONS.

The features of this case are so strongly marked with novelty, as to challenge, perhaps, a precedent in the annals of medicine. The improbability of another case occurring, or a nature at all analogous, will probably in the opinion of many, render this history, and any remarks, much more pertinent than I shall be able to offer, more curious than useful. I will, however, notwithstanding the obscurity of its circumstances ; hazard a few reflections on its exciting cause and various phenomena.

The introduction of extraneous substances into the human system, is an occurrence by means uncommon, as the records of medicine and frequent observation sufficiently evince. But that such a multitude of distinct, small ferruginous bodies as above described, should all find their way by the same selfcreated passage from the œsophagus to the left ureter, and from thence be voided at such distant periods of time, seems to me not very easy to comprehend.

Did they when swallowed pass immediately into the stomach ? Or where they detained in the œsophagus ?

This latter hypothesis may at first view appear incredible ; but I am not sure that the other, will, on examination, be found less embarrassed. As one of the two must be the fact, we are reduced to a choice of difficulties which merit a respective discussion.

If they passed directly into the stomach, we might expect they would subside collectively to the most depending part ; which part might possibly be in contact with the left kidney. Here, if nothing should disturb their repose, they might possibly rest till they eroded the coats of this viscus, which, forming an adhesion with

the kidney, might allow them to penetrate its substance, and finally to reach the ureter.

But they undoubtedly excited the hiccups. Should we not then more naturally expect to find the cause of this symptom exerting its action on the cardia, or more probably still on the diaphragm itself? That these substances should attach themselves to the cardia, seems to me less probable than to the œsophagus. When they were swallowed, the patient was in a recumbent posture; she complained of their sticking in her throat, and tried various expedients to promote their passage into the stomach: Might they not remain in some part of the œsophagus and become a nucleus to a body of coagulated lymph which would sheath them over, and confine them till they perforated the œsophagus and fell on the diaphragm, and at length worked their way into the left kidney, which lies higher and nearer the diaphragm than the right:

But enough of hypothesis, lest I continue to darken council by words without knowledge. They by some rout or other, passed through the left kidney into the ureter, where they announced their arrival the sixth day after the cessation of the hiccups, placing us in doubt and uncertainty whether this symptom yielded to medical aid, or to the transition of the exciting cause, from parts more, to parts less susceptible of excitement to this morbid action.

My grateful acknowledgments are due on this occasion to the venerable Dr. Holyoke, and most of the respectable Physicians of this and the neighbouring towns, for their friendly attention to this extraordinary case.

Salem, April 1st, 1814.